UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,256	07/26/2006	Eckhard Kruse	1034193-000035	3047
21839 7590 10/02/2008 BUCHANAN, INGERSOLL & ROONEY PC			EXAMINER	
POST OFFICE	BOX 1404	WILLIAMS, CLAYTON R		
ALEXANDRIA, VA 22313-1404		ART UNIT	PAPER NUMBER	
			2157	
			NOTIFICATION DATE	DELIVERY MODE
			10/02/2008	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

	Application No.	Applicant(s)		
	10/567,256	KRUSE ET AL.		
Office Action Summary	Examiner	Art Unit		
	Clayton R. Williams	2157		
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet with the	correspondence address		
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory peri  - Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the ma earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 1.136(a). In no event, however, may a reply be liod will apply and will expire SIX (6) MONTHS frou tute, cause the application to become ABANDON	DN. timely filed om the mailing date of this communication. NED (35 U.S.C. § 133).		
Status				
Responsive to communication(s) filed on 24 2a)    This action is <b>FINAL</b> . 2b)    T 3)    Since this application is in condition for allow closed in accordance with the practice under	his action is non-final. wance except for formal matters, p			
Disposition of Claims				
4) ☐ Claim(s) 1-6,10-17 and 20-22 is/are pending 4a) Of the above claim(s) is/are withd 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6,10-17 and 20-22 is/are rejected 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and Application Papers	drawn from consideration.			
· · _				
9)☑ The specification is objected to by the Exam  10)☐ The drawing(s) filed on is/are: a)☐ a  Applicant may not request that any objection to t  Replacement drawing sheet(s) including the corr  11)☐ The oath or declaration is objected to by the	accepted or b) objected to by the the drawing(s) be held in abeyance. S rection is required if the drawing(s) is c	ee 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summa Paper No(s)/Mail 5)  Notice of Informa 6) Other:			

Application/Control Number: 10/567,256 Page 2

Art Unit: 2157

## **DETAILED ACTION**

1. Claims 1-6, 10-17 and 20-22 are pending in this application per amendment.

## Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 1, 4-6, 10, 11 and 13-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, 6, 10, 11, 13 recite the limitation: "with/the web servers in the respective distributed installations". The claim is unclear as to identification of which web servers are associated with what distributed installations.

Claims 4 and 14 recite limitation regarding data/information interchanged with web servers which have been combined into a uniform structure". The claims are unclear regarding what data "has been combined into a uniform structure".

Claims 5 and 15 recite imitations concerning an integration layer preprocesses data requests from the applications. The claims are unclear regarding what constitutes "preprocessing".

Claim 11 recites the limitation: "by means of a suitable abortion criteria". Claim is unclear regarding what constitutes a "suitable" abortion criteria

- 4. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: The step of combining data/information interchanged with web servers using the integration layer.
- 5. Claims 1, 3, 11 have insufficient antecedent basis for the following limitations:
  - a. Claims 1, 3, 11:"the respective distributed installations"
  - b. Claim 11: "the procedure"

Appropriate correction is required.

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 5 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Par. [0040] of the PGPub for the instant application mentions "preprocessing", but fails to describe what steps/actions are entailed in "preprocessing" to level of satisfaction to one of ordinary skill in the art.

was in connection with the programming of a general purpose computer.").

## Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 1-6, 10-17 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crater et al. (US 6,201,996: hereinafter Crater), in view of Fleischman (US 6,507,847: hereinafter Fleischman).

For claim 1, Crater discloses a system for web-based monitoring (col. 9, lines 16-19, disclosure of web pages 165 of system 100 serving collected monitoring information to client computers) and control of distributed installations (col. 10, lines 40-44, disclosure

that system allows web-browser based clients to issue commands to remote systems) with at least one web client (col. 9, lines 60-66, disclosure of browser 220) which interchanges data/information with web servers in the respective distributed installations via communication links, and that wherein the at least one web client comprises applications and an integration layer which execute, show and/or display the data/information interchange with the distributed installations (col. 9, lines 60-66, ability of browser 220 to execute applets) and wherein the distributed installations store data structures with references, where the references contain pointers to data, structures and/or substructures in further distributed installations (col. 21, lines 35-38, disclosure of controllers having pointers that point to data structures in other controllers on the network) and wherein the integration layer executes the evaluation of the pointers with further distributed installations recursively or cyclically (col. 21, lines 35-40, disclosure of client system processing the pointers delivered to it by the multiplicity of controller devices and individually contacting each of these controllers to resolve pointer dependencies which point to further controllers)

Crater fails to explicitly disclose:

"wherein abortion criteria are provided for the purpose of avoiding continuous loops in the case of cyclic execution of the pointers"

However, Fleischman discloses a method for terminating a query before a pointer "loopback" condition ensues (col. 9, lines 42-49). Crater and Fleischman are analogous art because both are from the field of database querying.

It would have been obvious to one skilled in the art at the time of the invention to modify the teachings of Crater with Fleischman, because this modification would allow a database query to terminate before an infinite loopback condition impacts system performance by needlessly consuming system resources.

For claim 2, the combination of Crater and Fleischman discloses the system as claimed in claim 1, wherein the integration layer is formed by a piece of integral software for data interchange and/or for data evaluation with the distributed installations (Crater, col. 9, lines 61-66 and col. 10, lines 14-22).

For claim 3 the combination of Crater and Fleischman discloses the system as claimed in claim 1, wherein the purpose of data interchange between the web client and the distributed installations is served by virtue of the web client containing representative services for communication by the web servers in the respective distributed installations, said representative services communicating with the integration layer and with the web servers in the respective distributed installations (Crater, col. 21, lines 37-39, disclosure of multitude of system 100s communicating with requesting client).

For claim 4 the combination of Crater and Fleischman discloses the system as claimed in claim 1, wherein the applications stored in the web client are applications or application programs which show and/or display data/information interchanged with web servers which have been combined into a uniform structure using the integration layer

(Crater, col. 9, lines 34-39, disclosure of web browser receiving content from multiple system 100s and combining this data for presentation).

For claim 5, the combination of Crater and Fleischman discloses the system as claimed in claim 1, wherein the integration layer preprocesses data requests from the applications (Crater, col. 21, lines 18-22, applets serve as intermediaries between web browser and controllers, whereby the applets accept input from browser, display results through browser and process information received from network systems).

For claim 6 the combination of Crater and Fleischman discloses the system as claimed in claim 1, wherein the applications, the integration layer and representative services for communication by the web servers in the respective distributed installations are in the form of software components and can be installed and executed automatically using standard web mechanisms (Crater, col. 9, lines 60-66, disclosure of web browser and associated applets).

For claim 10, the combination of Crater and Fleischman discloses the system as claimed in claim 1, wherein the data interchange between the applications, the integration layer and representative services for communication by the web servers in the respective distributed installations are in the form of software components and can be executed using local function calls (Crater, col. 9, lines 60-66, disclosure of browser 220 utilizing applets, applets which interact with browser using local service calls), and

the data interchange between the representative services and the web servers in the distributed installations can be executed using web service calls (Crater, col. 9, lines 16-20, disclosure that interaction between controller and querying computer by way of web services functionality).

For claim 11, Crater discloses a method for web-based monitoring (col. 9, lines 16-19) and control of distributed installations (col. 10, lines 40-44) with at least one web client (col. 9, lines 60-66, disclosure of browser 220) which interchanges data/information with web servers in the respective distributed installations via communication links, and the at least one web client stores applications and an integration layer which are used to execute, show and/or display the data/information interchange with the distributed installations (col. 9, lines 61-66) and wherein pointers in the respective distributed installations to further distributed installations involve an evaluation of the pointers of the distributed installations being executed recursively or cyclically using the integration layer (col. 21, lines 35-40, disclosure of client system processing the pointers delivered to it by the multiplicity of controller devices and individually contacting each of these controllers to resolve pointer dependencies which point to further controllers) and wherein cyclic execution of the evaluation of the pointers involves the procedure being interrupted by means of suitable abortion criteria and a generated data display being transmitted to a calling client application (col. 21, lines 34-39, disclosure of generated data being transmitted to calling client application).

Crater fails to explicitly disclose:

"wherein cyclic execution of the evaluation of the pointers involves the procedure being interrupted by means of suitable abortion criteria and a generated data display

being transmitted to a calling client application".

However, Fleischman discloses a method for terminating a query before a pointer "loopback" condition ensues (col. 9, lines 42-49). Crater and Fleischman are analogous art because both are from the field of database querying.

It would have been obvious to one skilled in the art at the time of the invention to modify the teachings of Crater with Fleischman, because this modification would allow a database query to terminate before an infinite loopback condition impacts system performance by needlessly consuming system resources.

For claim 12, the combination of Crater and Fleischman discloses the method as claimed in claim 11, wherein the integration layer is formed by a piece of integral software for data interchange and/or for data evaluation with the distributed installations (Crater, col. 9, lines 61-66 and col. 10, lines 14-22).

For claim 13, the combination of Crater and Fleischman discloses the method as claimed in claim 11, wherein the purpose of data interchange between the web client and the distributed installations is served by virtue of the web client storing representative services which communicate with the integration layer and with the web

servers in the respective distributed installations (Crater, col. 21, lines 37-39, disclosure of multitude of system 100s communicating with requesting client).

For claim 14, the combination of Crater and Fleischman discloses the method as claimed in claim 11, wherein the data/information interchanged with web servers which have been combined into a uniform structure using the integration layer are shown and/or displayed using the applications stored in the web client (Crater, col. 9, lines 34-39, disclosure of web browser receiving content from multiple system 100s and combining this data for presentation).

For claim 15, the combination of Crater and Fleischman discloses the method as claimed in claim 11, wherein the purpose of requesting data from the web servers in the distributed installations is served by virtue of the applications being used to preprocess requests from the integration layer (Crater, col. 21, lines 18-22, applets serve as intermediaries between web browser and controllers, whereby the applets accept input from browser, display results through browser and process information received from network systems).

For claim 16, the combination of Crater and Fleischman discloses the method as claimed in claim 11, wherein the application, the integration layer and representative services that communicate with the integration layer and with the web servers in the respective distributed installations are in the form of software components and are

installed and executed automatically using standard web mechanisms (Crater, col. 9, lines 60-66, disclosure of web browser and associated applets).

For claim 17, the combination of Crater and Fleischman discloses the method as claimed in claim 11, wherein the distributed installations store data structures with references, the references containing pointers to data, structures and/or substructures in further distributed installations (Crater, col. 21, lines 35-38, disclosure of controllers having pointers that point to data structures in other controllers on the network).

For claim 20, the combination of Crater and Fleischman discloses the method as claimed in claim 11, wherein the references between the distributed installations are resolved only following a request by the web client (Crater, col. 21, lines 34-40, disclosure that references between controllers resolved in response to request by client).

For claim 21, the combination of Crater and Fleischman discloses the method as claimed in claim 11, wherein the data/information in a first distributed installation are first loaded in the integration layer and evaluated in relation to pointers with further distributed installations (Crater, col. 21, lines 39-40, disclosure of client, rather than controllers, making connections to individual controllers and resolving pointers in order to reach referenced additional controllers).

For claim 22, the combination of Crater and Fleischman discloses the method as claimed in claim 11, wherein the data interchange between the applications, the integration layer and representative services that communicate with the integration layer and with the web servers in the respective distributed installations in the distributed installations is executed using local function calls (Crater, col. 9, lines 60-66, disclosure of browser 220 utilizing applets, applets which interact with browser using local service calls), and the data interchange between the representative services and the web servers in the distributed installations is executed using web service calls (Crater, col. 9, lines 16-20, disclosure that interaction between controller and querying computer by way of web services functionality).

#### Response to Arguments

Applicant's arguments have been fully considered but they are not persuasive.

Argument I: Crater does not disclose an integration layer.

Argument II: Crater does not disclose wherein an integration layer executes an evaluation of the pointers with further distributed installations recursively or cyclically.

Response to Arguments I and II: Par. [0035] of the PGPub of the instant application explicitly defines the "integration layer" as a web software component. The cited portions of Crater used in the rejections of claims 1-5, for example, clearly demonstrate a client with web software which performs data aggregation of data gathered from a multitude of controllers, as well as a client which recursively and cyclically resolves pointers found in contacted controllers.

### Conclusion

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clayton R. Williams whose telephone number is 571-270-3801. The examiner can normally be reached on M-F (8 a.m. - 5 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/567,256 Page 14

Art Unit: 2157

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sept. 23, 2008 CRW Clayton R. Williams Patent Examiner Art Unit 2157

/Ario Etienne/

Supervisory Patent Examiner, Art Unit 2157